

**WEST**☐ Generate Collection

L5: Entry 11 of 19

File: USPT

Jun 9, 1992

DOCUMENT-IDENTIFIER: US 5120802 A

TITLE: Polycarbonate-based block copolymers and devices

## DEPR:

The copolymers of this invention are useful in the fabrication of totally or partially bioresorbable medical devices. These devices take many forms depending on intended use. Illustrative of useful devices which may be fabricated from the copolymers of this invention are orthopedic devices such as pins, plates, clamps, screws and plates; vascular implants or supports such as arterial grafts, clips, staples, nerve channels or supports, and the like. Illustrative of still other devices which can be fabricated totally or in part from the copolymers of this invention are devices for tendon and ligament replacement, breast prostheses, dental packs, sponges, hernia patches, burn dressings, absorbant swabs, and the like. Devices fabricated from the copolymers of this invention may be totally bioresorbable or may be fabricated in part from biodurable materials which are relatively resistant to biodegradation. Illustrative of useful biodurable materials are silicone, silicone rubber, polyethylene, polyethylene terephthalate, polyfluoroethylene, polyphosphazene, polyurethane, segmented polyurethane, and the like. Also useful are biodurable metallic substances such as titanium, stainless steel, and alloys such as chromium-cobalt-molybdenum alloys, titanium-aluminum-vanadium alloys, and the like.

## DEPR:

The fibers of the present invention are useful in the formation of a variety of devices. The fibers and/or yarns braided or twisted from one or more types of fibers, may be used in the fabrication of various types of articles having medical applications using conventional techniques. For example, such fibers and/or yarns may be woven, braided and/or knitted into fabrics having various structural configurations as for example, tubes, which are knitted, woven or felted, fibrillar products, such as velours. The fibers of this invention are preferably used as sutures or fasteners, and in the fabrication of implantable medical devices such as vascular implants and nerve channels; burn and wound covers; facial substitutes; orthopedic substitutes for bone or bone repair; breast prostheses; tendon and ligament replacements; hernia patches; and the like. Other devices not necessary for implantation purposes can also be envisaged, e.g., cell culture substrates, absorbants or swabs, medicated dressings, gauzes, fabrics, sheets, felts or sponges for hemostasis, dental packs and the like. A good description of the formation of bioresorbable materials in part, or in total as matted surgical dressings may be found in Roth U.S. Pat. No. 3,937,223.

**WEST****Freeform Search**

---

<b>Database:</b>	<div>US Patents Full-Text Database JPO Abstracts Database EPO Abstracts Database Derwent World Patents Index IBM Technical Disclosure Bulletins</div>
<b>Term:</b>	<div>Breast same (bioresorb\$ or bioabsorb\$)</div>
<b>Display:</b>	<div>20 Documents in Display Format: TI Starting with Number 1</div>
<b>Generate:</b>	<div><input type="radio"/> Hit List <input checked="" type="radio"/> Hit Count <input type="radio"/> Image</div>

---

Search

Clear

Help

Logout

Interrupt

Main Menu

Show S Numbers

Edit S Numbers

Preferences

---

**Search History**

---

Today's Date: 10/31/2000

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT	Breast same (bioresorb\$ or bioabsorb\$)	19	<u>L5</u>
USPT	((623/8)!.CCLS. ) same (bioresorb\$ or bioabsorb\$)	0	<u>L4</u>
USPT	((623/8)!.CCLS. ) same (resorb\$ or absorb\$)	0	<u>L3</u>
USPT	((623/8)!.CCLS. )	277	<u>L2</u>
USPT	((623/8)!.CCLS. ) same (resorb\$ or absorb)	0	<u>L1</u>

**WEST**☐ Generate Collection

L5: Entry 2 of 19

File: USPT

Jan 23, 1996

DOCUMENT-IDENTIFIER: US 5486593 A

TITLE: Medical devices fabricated from copolymers having recurring carbonate units

## BSPR:

The devices of this invention may take many forms and have varying degrees of bioresorbability and/or biodegradability, depending on intended use. For example, the devices of this invention may be solid articles, or may be fibrous devices constructed of woven or non-woven fabric made of fibers formed from the biopolymers of this invention or may be combination of solid and fibrous portions. For example, the device of this invention may be fabricated from fibers and/or yarns which have been woven, braided and/or knitted into fabrics having various structural configurations using conventional means, Which fabrics may then be used to fabricate a device, such as a wound cover, gauze, and a vascular graft. The device may be a solid part which has been fabricated into the desired shape using a conventional technique for fabricating parts out of thermoplastics, such as extrusion, molding and solution casting, such as an extruded hollow tubular nerve channel or extruded hollow vascular graft, or a stent for use in angioplasty. The device may also be a composite device having a body which is composed of a woven fabric or a solid part which may or may not be formed from one or more biopolymers of this invention coated with one or more biopolymers of this invention using such techniques as moldings, solution dipping and solution coating; or the device may be a layered device in which one or more layers are formed from the biopolymers of this invention. Illustrative of useful devices of this invention are orthopedic and fracture fixation devices such as maxillo facial repair implants, intraosseous implants, pins, clamps, screws and plates; vascular implants such as vascular grafts; wound closing device such as sutures, fasteners, clips and staples; nerve channels; vascular stents; and the like. Illustrative of still other devices within the scope of this invention are devices for tendon and ligament replacement, breast prostheses, wound and burn covering, dental repair, sponges, tracheolar replacements, hernia patches, absorbant swabs, fallopian tube and sperm ducts, drug delivery devices and the like.

## BSPR:

The fibers of this invention are preferably used in the fabrication of implantable bioresorbable medical devices such as vascular implants, nerve channels; burn and wound covers; facial substitutes; orthopedic substitutes for bone or bone repair; breast prostheses; tendon and ligament replacements; hernia patches; and the like, or used as sutures and fasteners. Other devices not necessary for implantation purposes can also be formed from the fibers of this invention. The devices include cell culture substrates, absorbants or swabs, medicated dressings, gauze, fabric, sheet, felt or sponge for hemostasis, dental packs and the like. Particularly useful devices are woven or knitted fabrics formed into tubes of varying shapes, lengths and diameters. Illustrative of these devices are tubular prostheses such as vascular grafts, nerve guidance channels and the like. The particular configuration of such tubes may vary according to the size and shape of the organ to be repaired, and whether the intended repair is to take place in human surgery or in surgery involving other animal species.